

TABLE C-1. ESTIMATED ANNUAL FUEL EVAPORATIVE EMISSIONS FOR THE AMUNDSEN-SCOTT STATION DURING PROJECT ICE CUBE

Year	2004	2005	2006	2007	2008	2009	2010	2011
Project Year	1	2	3	4	5	6	7	8+
Activity Resulting in the Release of Petroleum Hydrocarbon Vapors to the Atmosphere								
Diesel Fuel Transfer to Equipment								
Annual Diesel Fuel Usage (liters/year)	1,512,000	1,701,000	1,701,000	1,701,000	1,701,000	1,701,000	1,701,000	1,701,000
Estimated Number of Diesel Fuel Transfers	4	4	4	4	4	4	4	4
Diesel Evaporative Emissions (kg/year) [1]	9.2	10.3	10.3	10.3	10.3	10.3	10.3	10.3
Gasoline Fuel Transfer to Equipment								
Annual Gasoline Usage (liters/year)	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Estimated Number of Gasoline Transfers	3	3	3	3	3	3	3	3
Gasoline Evaporative Emissions (kg/year)[2]	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
TOTAL WORKING LOSSES	29.2	30.4	30.4	30.4	30.4	30.4	30.4	30.4
ESTIMATED STANDING LOSSES [3]	29.2	30.4	30.4	30.4	30.4	30.4	30.4	30.4
TOTAL EVAPORATIVE EMISSIONS (kg/year)	58.5	60.8	60.8	60.8	60.8	60.8	60.8	60.8

[1] Evaporative Emissions Working Losses for Diesel Fuel = $[1.52\text{E-}6] \times [\text{Annual Fuel Usage}] \times [\text{Number of transfers}]$.

[2] Evaporative Emissions Working Losses for Gasoline = $[4.46\text{E-}4] \times [\text{Annual Fuel Usage}] \times [\text{Number of transfers}]$.

[3] Estimated standing losses are assumed to be equal to working losses.

TABLE C-2. ESTIMATED ANNUAL FUEL EVAPORATIVE EMISSIONS FOR PROJECT ICE CUBE

Project Year	1	2	3	4	5	6	7	8+
Activity Resulting in the Release of Petroleum Hydrocarbon Vapors to the Atmosphere								
Diesel Fuel Transfer to Equipment								
Annual Diesel Fuel Usage (liters/year)	16,632	120,960	362,880	483,840	483,840	483,840	483,840	12,474
Estimated Number of Diesel Fuel Transfers	4	4	4	4	4	4	4	4
Diesel Evaporative Emissions (kg/year) [1]	0.1	0.7	2.2	2.9	2.9	2.9	2.9	0.1
Gasoline Fuel Transfer to Equipment								
Annual Gasoline Usage (liters/year)	1,000	2,000	2,000	2,000	2,000	2,000	2,000	200
Estimated Number of Gasoline Transfers	3	3	3	3	3	3	3	3
Gasoline Evaporative Emissions (kg/year)[2]	1.3	2.7	2.7	2.7	2.7	2.7	2.7	0.3
TOTAL WORKING LOSSES	1.4	3.4	4.9	5.6	5.6	5.6	5.6	0.3
ESTIMATED STANDING LOSSES [3]	1.4	3.4	4.9	5.6	5.6	5.6	5.6	0.3
TOTAL EVAPORATIVE EMISSIONS (kg/year)	2.9	6.8	9.8	11.2	11.2	11.2	11.2	0.7

[1] Evaporative Emissions Working Losses for Diesel Fuel = $[1.52E-6] \times [\text{Annual Fuel Usage}] \times [\text{Number of transfers}]$.

[2] Evaporative Emissions Working Losses for Gasoline = $[4.46E-4] \times [\text{Annual Fuel Usage}] \times [\text{Number of transfers}]$.

[3] Estimated standing losses are assumed to be equal to working losses.